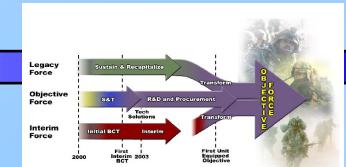




Force Projection Supporting the Transforming Army

**R&D Symposium: JLOTS and Logistics
from the Sea
29-31 Jan 02**

CPT Sarah Small
Army G-4, Strategic Mobility Division

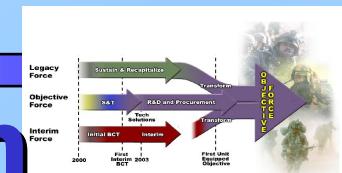


Agenda

- Army Transformation
- DCSLOG Transformation Charter
- Army Power Projection Program (AP3)
- AP3 Enablers
- Pre-positioning Initiatives
- Summary



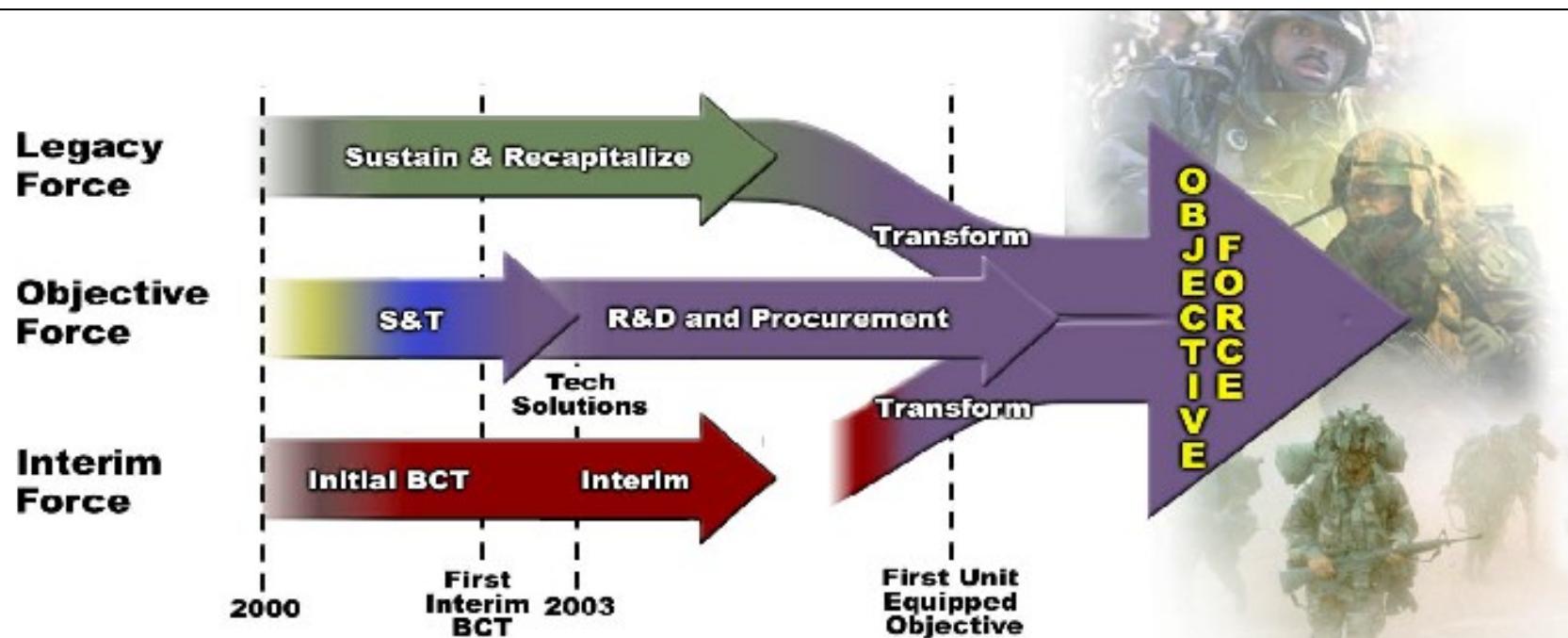
Army Transformation



The Army will transform as rapidly as possible, maintaining focus on warfighting readiness and taking care of our people. Transformation will entail simultaneous maintenance of a trained and ready force capable of fighting and winning the Nation's wars, transformation of the operational force, and of the institutional Army.

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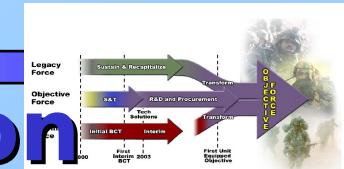
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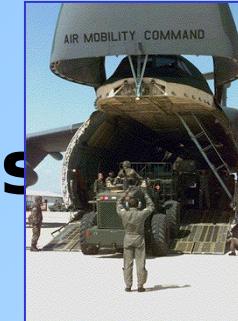
Sustaining The Transforming Army

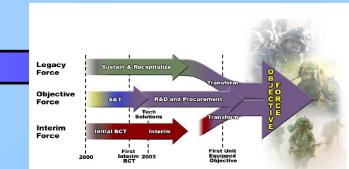


DCSLOG Transformation Charter



- **Enhance Strategic Responsiveness**
 - *meet new deployment timelines*
- **Reduce the CS/CSS Footprint in the Combat Zone**
- **Reduce Cost of Logistics without Reducing Warfighting Capability Readiness**



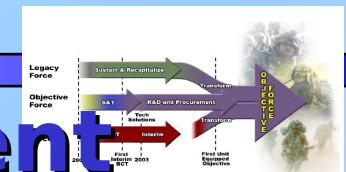


Enhance Strategic Responsiveness

Meet new deployment timelines



Transforming Deployment Capability



MRS BURU

1 Hvy Bde Afloat by C+15

2 Hvy Divs from CONUS by C+30

5 Div Contingency Corps (w/CSS) by C+75

APS-3

RAIL

CONTAINERS

AUTOMATION

WATERCRAFT

CONUS INFRASTRUCTURE



BRIDGING ACTIONS UNDERWAY



LMSR -18 ON HAND 19 BY FY02



C-17 - 80 ON HAND 120 BY FY04

AP3 DISTRIBUTION STUDY

ARMY POWER PROJECTION PROGRAM (AP3) ACTION PLAN DEVELOPMENT

POWER PROJECTION TASK FORCE

MOBILITY REQUIREMENTS STUDY- 2009

ARMY TRANSFORMATION WAR GAME

AP3 BASELINE DEPLOYMENT STUDY

Army Vision

BDE in 96 hrs

1 Div in 120 hrs

5 Div in 30 days

HI-SPEED SEALIFT

ULTRA LARGE AIRLIFTER

SUPER SHORT TAKE-OFF & LANDING SYSTEM

WATERCRAFT RESTRUCTURING

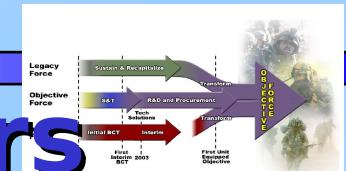
PREPOSITIONING STRATEGY

CONUS/OCONUS INFRASTRUCTURE



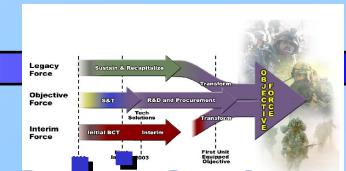


Critical AP3 Enablers



- **High Speed Sealift**
 - 100 knots, up to 10K ST, 10K NM range
 - Size requirements limit commercial application
 - Technology?
- **Ultra Large Airlift (ULA)**
 - 100-130 Knots, up to 1K ST, 8700 NM range
 - Commercial application for middle market?
 - Survivability = ?
- **Infrastructure Enhancements**
 - To address Legacy shortfalls
 - Interim/Objective force requirements
- **Revised Prepositioning Strategy**
 - Contribution to Stretch Goals
 - Flexibility -- Full Spectrum Ops -- Austere Entry
- **Intratheater Lifter -- Super Short Take-off & Landing**
 - Survivability/Flexibility
 - Unimproved Runway
 - Advanced Cargo Handling
- **Automation - (TC-AIMS II / JFRG II)**





JIWG Concept of Operation

Joint Infrastructure Working



PURPOSE

- Support for Army Transformation Vision

SCOP

- Joint Physical Infrastructure
- Deployment C2
- Service POM

BACKGROUND

- MRS BURU: Army Strategic Mobility Program = \$5 Billion
- PPP Infrastructure Improvements

OBJECTIVES

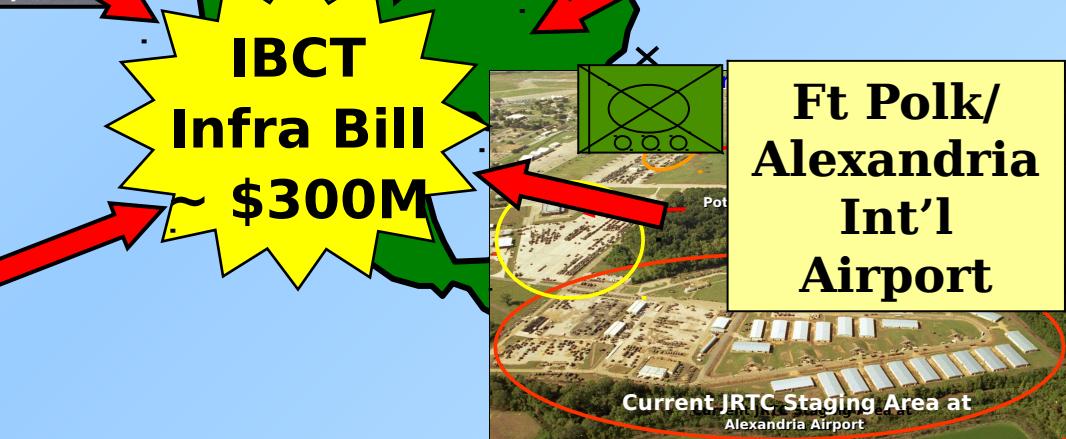
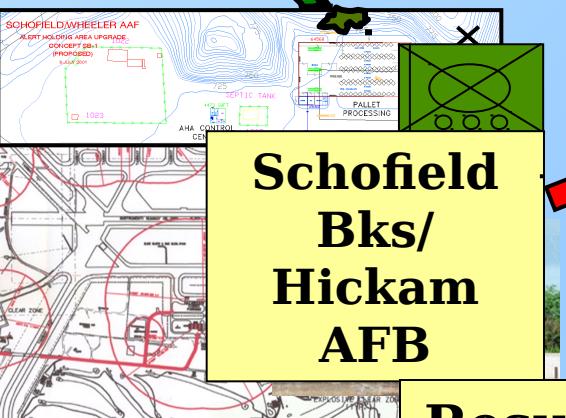
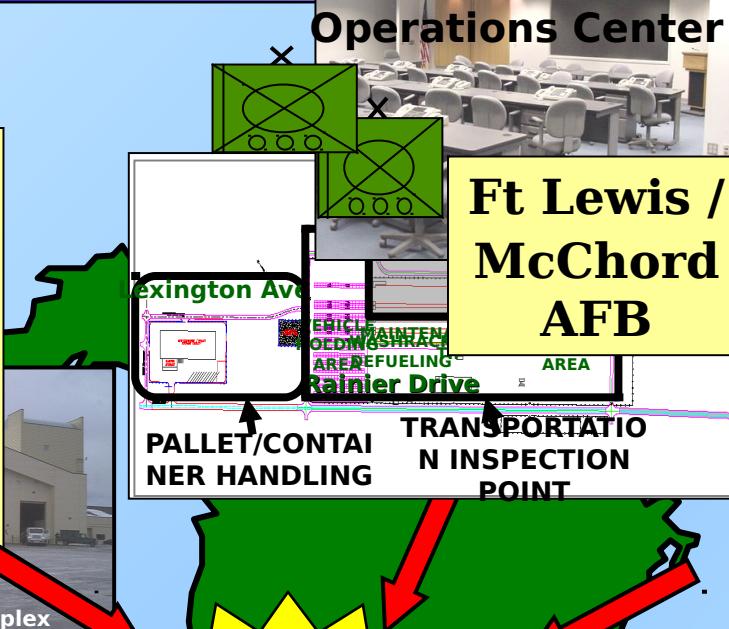
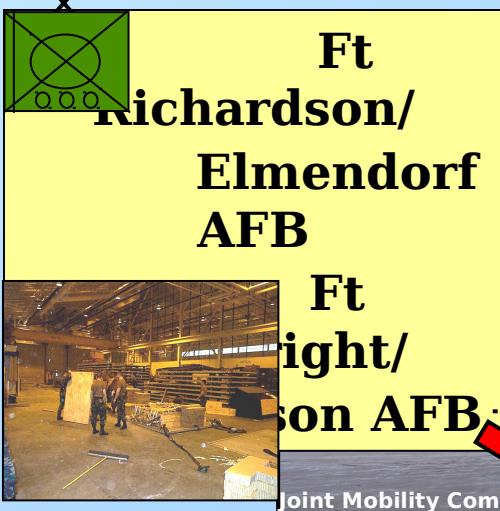
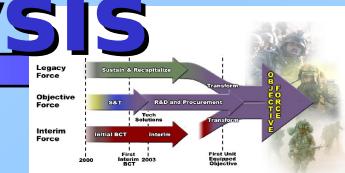
- Develop Infrastructure Blueprints
- Leverage Existing Capabilities
- Identify Required Improvements
- Est. Army Transformation Infrastructure POM
- Est. a new ASMP-like Program for the Future

POINT: Cooperative Effort to Synchronize Service and Joint Programs

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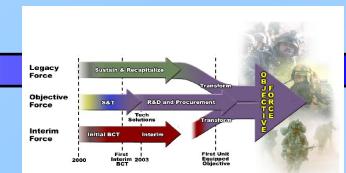
Infrastructure Analysis



Results of Army/Air Force Infrastructure Analysis identified Deployment Shortfalls at IBCT Locations



Army Watercraft Restructuring Plan

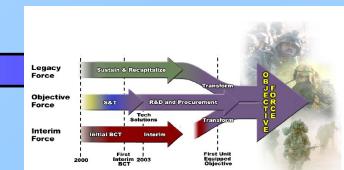


- Position Army watercraft for strategic & operational response
- Ensure the quantity and type watercraft support CINC requirements
- Balance the force structure without degrading capability





Theater Support Packages



APS 4 - PACOM

Forward Stationed

3 LSVs - crewed PACOM

PREPO

**1 Hvy Boat Co
1 Med Boat Plt + Maint
1 Floating Craft Co
1 Modular Causeway Co**

APS 5 - CENTCOM

Forward Stationed

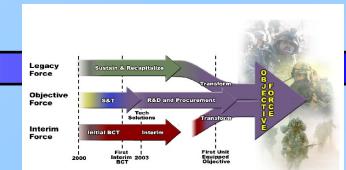
**2 LSVs - 1 crewed CENTCOM
1 crewed EUCOM**

PREPO

**1 Hvy Boat Co
1 Med Boat Plt + Maint
1 Floating Craft Co
1 Modular Causeway Co**



Situation



CINCs Want the Problem Solved; and They Are a Big Part of the Solution

END STATE

WATERCRAFT CAPABILITY IN PLACE TO SUPPORT CINC

**AC & SV Contracts Expire
09-02 & 06-02**

AC & SV Equipment Placed in CINC/HN Approved Locations

AC & SV Equipment Unloaded

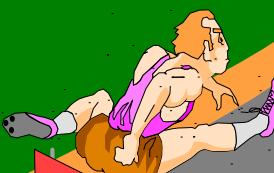
Watercraft Units Inactivate/Activate

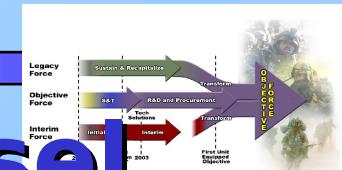
Site Preparations Completed

Site Approvals (CINCs, Political - Embassy & Host Nation)

Site Surveys

Optimal Glide Path





Theater Support Vessel

Objective Capabilities

- 40+ Knots Fully Loaded
- 1250 ST Capacity
- Range: 4700+ NM @ 40+

- knots (light load)
- Sea State 7+ Survivable (Wave Height up to 40-ft)
- Enroute Mission Planning
- Joint Interoperable

Rapid Employment of PREPO

Assets

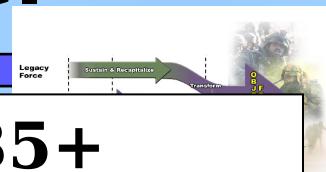
- PAX & Equip Move Together
- Reduced AO CS/CSS Footprint
- By-Pass Theater Choke Points
- Access to Austere Ports
- Reduce Asymmetric

Increases Ports Accessible To JTF Commander By a Factor of 5





Theater Support Vessel (TSV)



TSV



- High Speed (35+ Knots)
- Shallow Draft
- Cargo Weight Constraints

PREPO ASHORE



PREPO AFLOAT



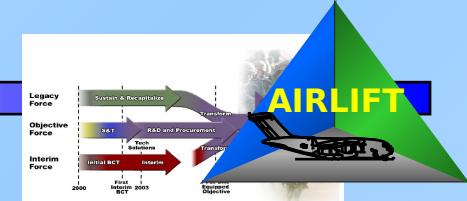
JLOTS

Adding TSV to Forward Deployed Afloat/Ashore PREPO Provides Increased Options

Sustaining The Transforming Army



Ultra Large Airlifters (ULAs)



Sky Cat (United Kingdom)

Future Capability ?

- Large Capacity
- Altitude Limited
- Relatively Slow
- Technology Risks
- Commercial Risks



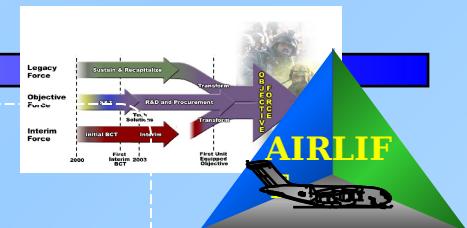
Cargo Lifter (Germany)



Sustaining The Transforming Army



Usable Cargo Compartments



C130

50' long
9' wide
9' high

12 STON

C17

85' long
18' wide
12' high fwd of wing
14' high aft of wing

45 STON

61 STON

C5
144' long
19' wide
13.5' high

Cargo Lifter 160
164' long
26' wide
26' high

176 STON

ULAs Offer
Quantitative Increase
in Volume



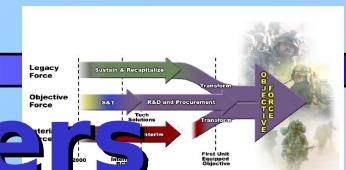
Sky Cat 1000
262' long
40' wide
26' high

715 STON

Sustaining The Transforming Army



Sea State (SS) Enablers



Modular Causeway System (MCS)

- Moves cargo from ship-to-shore
- Deployed aboard container ships or other cargo-type vessels



- Breakwater system mitigates SS3 to SS2 or less
- Jul 02 deploy final prototype with JFTX



Rapidly Installed Breakwater System (RIBS)



Capabilities of Army Watercraft



Joint Logistics Over The Shore (JLOT)



- Instream discharge
- Through Sea State 3

Current In-Stream



2 LMSRs in the Stream

Future In-Stream



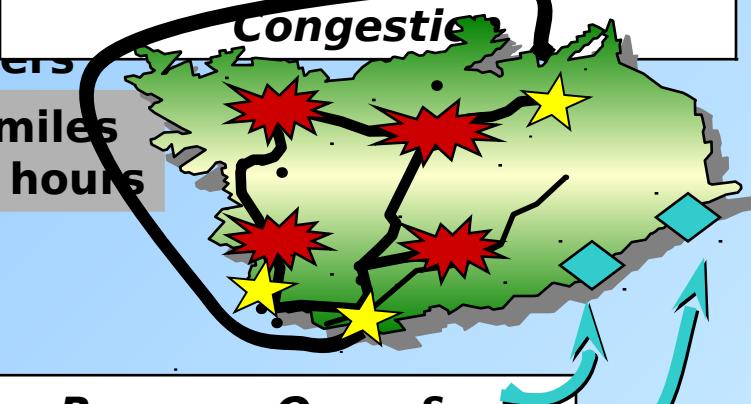
Intra-Theater Movement



- Heavy Battalion TF
- Sustainment - 340 - 20' containers

By- Pass Battlefield Congestion

400 miles
in 40 hours



Port Opening



- Recovery and Salvage Ops
- Stand Alone or Support HN

Recover, Open &
Operate
Damaged or Degraded
Ports

Army Watercraft Support All Pha

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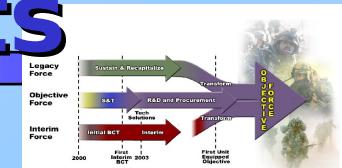
Sustaining The Transforming Army



Three Types of Ports

“...port denial is one of the most likely early scenarios.”

Mobility Requirements Study



Fixed Port
(Improved Port)



Unimproved Port

(Denied/Degraded Port)



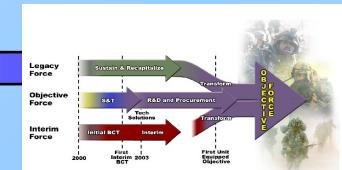
Army Watercraft Supports All Three Types

Bare Beach
(No Port)

Sustaining The Transforming Army



Leverage Commercial Capabilities



- Containerization of Unit Equipment - improved force closure using VIS assets



- Shallow Draft High Speed Sealift
 - Intertheater
 - Intratheater



- Virtual Airlines

- CRAF

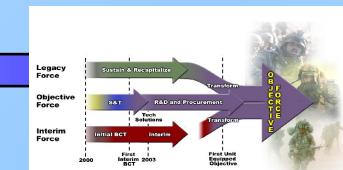
- Effect design of PAX to cargo conversions
- ULA ?

- VISA

Sustaining The Transforming Army



Summary



**Force Projection
Supporting the
Transforming Army...
by:**

**Increasing Strategic
Responsiveness, Reducing the
Footprint, and Reducing
Operating Cost**



Significant Challenges



**Need Essential Support from Commercial
Sector and Adequate Funding within DoD...**



Force Projection Supporting the Transforming Army

Questions?

CPT Sarah Small
Army G-4, Strategic Mobility Division